

**REMARKS**

The Examiner's action mailed on June 30, 2005, has been received and its contents carefully considered.

Claims 1-10 are pending in this application. Claims 7-9 are amended herein to correct minor informalities noted by the Applicant, and not for reasons related to patentability. Claims 1 and 8 remain the independent claims in this application.

Claims 1-10 stand rejected under 35 USC §103(a) as being obvious over Lee (U.S. Patent No. 6,246,883). The rejection is respectfully traversed.

Regarding independent claims 1 and 8, the Examiner asserts in the Action that Lee teaches a communication network system to send a data signal by way of a plurality of wireless communication terminals (see column 1, lines 33-36 and column 2, lines 24-27), wherein said plurality of wireless communication terminals includes at least one mobile communication terminal (reads on mobile station 102 as shown in Figure 1, see column 3, lines 41-49, also column 2, lines 24-27) moving on a predetermined route (according to the Examiner, this reads on the mobile station 102 moving in a particular route/path 107 within specific geographical area on certain schedule, see column 3, lines 27-35 and 42-49, and column 6, lines 61-64) and a plurality of fixed communication terminals of fixed along said predetermined route (according to the Examiner, the fixed communication terminals read on the users terminals or users base 103 within certain geographic area 104, 105, 106, see Figure 1, column 3, lines 42-49 and column 5, lines 4-6).

The Examiner further asserts that the claimed mobile communication terminal reads on a mobile base station 102, such as a meter reading mobile station, and the claimed fixed terminals read on homes such as 103. The Examiner argues that the collected meter readings data is inherently or at least obviously transferred to the gas utility company. The Examiner notes that the Lee reference teaches transmitting and/or receiving information to and/or from the mobile-based station (column 1, lines 33-36) and wireless transfer involving the mobile base station (column 2, lines 36-39). The Examiner argues the advantages of wireless transfer of information are well known in the art.

An important feature of the present invention is that each of the fixed communication terminals sends data signals to the other fixed communication terminals via the at least one mobile communication terminal. In other words, the at least one mobile

communication terminal, which makes the rounds of the plurality of fixed communication terminals, functions as a relay station (see, for example, application Figure 1). As a result, it is not necessary to communicate between the fixed nodes by utilizing a strong radio signal, thus preventing unnecessary radio interference. Further, there is no need to install a cable to establish communications between the fixed communication terminals, thus made it possible to establish a communication network at low cost (see, for example application page 29, lines 13-22). To reflect this limitation, claim 1 recites "data communication between the fixed communication terminals being made by way of the at least one mobile communication terminal." Similar language appears in independent claim 8.

It is respectfully submitted that the Examiner has failed to demonstrate that Lee teaches or suggests the above-mention feature of the present invention. The exemplary embodiment cited and discussed by the Examiner (column 3, lines 27-35) involves the automation of tasks that require periodically gathering or disseminating information in a particular geographic location. The example given is a mobile base station used to obtain meter readings, e.g., gas meter readings, and other data for users along its appointed route. This fails to disclose that the mobile base station 102 is functioning as a relay for data communication between users terminals, such as the user terminal 103 of area 104 and the user terminal 103 of area 105.

As already noted, the Examiner's argument is that "the collected meter reading data it is inherently or at least obviously transferred to the gas utility company." The means by which the collected data is downloaded to the gas utility company is not clearly specified in Lee. Moreover, even if the mobile base station were to transmit the collected meter readings data to the gas utility company, such as in the manner illustrated in Figures 6A-B of Lee, this would still be quite different from the communication between the plurality of user terminals to which claim 1 is directed.

In light of the foregoing, it is respectfully submitted that claim 1, and similarly claim 8, patentable distinguish over Lee. Further, it is submitted that claims 2-7 and 9-10 are allowable for at least the reason that they depend from claim 1 and 8.

Further, it is submitted that the dependent claims recite additional features that independently distinguish over the applied prior art. For example, with regard to claim 2, the Examiner argues that the limitation "each of the fixed communication terminals

includes a time information storage means to store time information” reads on the control station 604 in Figure 6B of Lee which basically stores information (see column 7, lines 43-67). First, this argument is inconsistent that the Examiner’s initial contention regarding claim 1, mentioned above, that “the fixed communications terminals read on the users terminals or users base 103...”. The same recited element cannot logically mean one thing in an independent claim and something else in a related dependent claim. Second, while Lee indicates that the control station generally serves as an information depot (column 7, line 12), there is no specific disclosure that either the control station or the users terminals include “a time information storage means to store time information.”

Further regarding claim 2, the Examiner asserts that the claimed feature of “a time information storage means to store time information specifying a time required for transferring said data signal to each of the other fixed communication terminals by way of each of the mobile communication terminals, timetable storage means to store a timetable of each of the mobile communication terminals and selecting means to select one of the mobile communication terminals to which said data signal is to be transferred based upon said time information and said timetable” is inherent or at least obvious. The Examiner’s argument is that transmitting and/or receiving information from/to a certain mobile communication station can be performed within a certain schedule, giving the example that meter reading is normally done according to schedules. The Examiner’s argument ignores that the purpose, in the present invention, of having the time information storage means, the timetable storage means and the selecting means is to enable a fixed terminal to determine the time when a data communication sent from that fixed terminal will be received by another fixed terminal when sent via one of several possible mobile terminals, and select the most advantageous route. Although it may be true that meter reading, for example, is normally done according to a schedule, the time of arrival of the collected data at the utility is of no particular concern to the homeowner, so that the functionality of the fixed terminals recited in claim 3 is, contrary to the Examiner’s contention, neither “inherent” nor “obvious”.

Claim 3 recites “the mobile communication terminal selected by said selecting means is the one of the mobile communication terminals determined to reach a desired fixed communication terminal in the shortest time.” The Examiner points to Lee as

teaching the mobile station moving within a certain proximity from the user terminal (see column 4, lines 49-54). The Examiner argues that efficiency in reaching the appropriate destination/home in the shortest time is required and obvious.

Although Lee does make a passing reference to scheduling more than one mobile terminal so as to provide adequate time to fully download a large data file to a particular user terminal (see column 6 lines 61-64), Lee totally fails to teach or suggest providing the user terminal with the capability of selecting one of the multiple mobile terminals with which to communicate. Moreover, as already noted above in connection with claim 2, there is nothing in Lee of that would "require" or make "obvious" the claimed capability of the fixed terminal to select "the one of the mobile communication terminals determined to reach a desired fixed communication terminal in the shortest time."

Claim 4 recites "said predetermined route is a circulating route, the plurality of mobile communication terminals includes a first mobile communication terminal and a second communication terminal each of which circulates in a mutually opposite direction, said time information includes a first time information corresponding to said first mobile communication terminal, and second time information corresponding to said second mobile communication terminal." The Examiner argues that having two mobile terminals traveling in opposite directions and each one of them having time information associated with it is obvious and does not rise to the level patentability. The Applicants respectfully disagree. As in the case of claims 2 and 3, the Examiner's obviousness arguments are unsupported by Lee, and ignore the significant role that the first time information and the second time information play in selecting between the first mobile communication terminal in the second mobile communication terminal so that the data signal is received at its destination in the shortest time.

Claims 5 and 6 are rejected by the Examiner for essentially the same reasons as discussed above with respect to claims 2 and 4. The Examiner asserts that numerous references disclose the teaching of multiple routes where data and information will be traveling in a telecommunication network, and that obviously, each route and associated destination must be available to receive this information. The Examiner argues that having a fixed station, as a stop point that receives information from a mobile terminal at each route is obvious and well known in the art. Examiner also argues that the claimed

"common point" reads on the control station 406 in Lee (see column 7 lines 8-67).

It is respectfully submitted that the Examiner's obviousness arguments are overly broad and not directed to important limitations recited in claims 5 and 6. For example, the Examiner's arguments do not address the limitation "said at least one mobile communication terminal including a first terminal information storage means to store a first terminal information specifying a plurality of fixed communication terminals fixed along its respective route and a transfer means to transfer said data signal to said specified fixed communication terminal in the event said data signal is destined to a fixed communication terminal not specified in said first terminal information" in claim 5, and the limitation "said specified fixed communication terminal includes a second terminal information storage means to store second terminal information specifying the fixed communication terminals fixed along each of said first route and said second route." Lee is not helpful to the Examiner's position because it fails entirely to teach or suggest a system having a second route sharing a common point with the first route, or any mechanism that allows a mobile terminal on one route to communicate with user terminals on the second route through the common point. The Examiner's assertion that the recited "common point" reads on control station 406 in Lee is also misplaced. As clearly described in Lee, the control station serves as an information depot to provide the mobile base station with information and/or to receive information from the mobile base station (column 7, lines 11-14). There is no teaching in Lee that the control station functions as a transfer point for data communication between a mobile terminal on one route and a mobile terminal on another route.

Claims 9 and 10 are rejected in the Action for the same reasons as discussed above with respect to claims 1 and 8, respectively. The Examiner also points to Lee column 4, lines 49-61, as disclosing the limitations of claims 9 and 10.

The rejection of claims 1 and 8 and the Examiner's grounds for rejection are fully discussed above. Claim 9 recites an invention in which the plurality of second communications terminals of claim 8, includes a plurality of fixed communication terminals fixed along the predetermined route and a plurality of user communication terminals each proximate to a respective one of the fixed communication terminals. This configuration of elements is shown by way of example in Figure 1 of the application, where terminals L, M, N and P are fixed terminals along the predetermined route Rt1, and terminals A, B, C and D

are user communication terminals each proximate to a respective one of the fixed communication terminals. Claim 9 recites the further limitation “data communication between the user communication terminals being made by way of the respective ones of the fixed communication terminals to which the user communication terminals are proximate.” In other words, the fixed communications terminals serve as relay points, in addition to the mobile communication terminal, for data communication between the user communication terminals.

What the text referenced by the Examiner discloses is that the mobile base station moves within a certain proximity of the user terminals such that the mobile base station's broadcast area includes the terminal. This proximate allows the mobile wireless communication means to cooperate with the terminal wireless communication means to establish a wireless communication link. Information is transmitted between the mobile base station and the terminal via the wireless communication link so established. In other words, Lee discloses that the mobile base station 102 communicates directly with the various user terminals 103 in its broadcast area. It is respectfully submitted that Lee neither teaches nor suggests a distinctly separate group of fixed communication terminals along the route serving as relay points.

In general, the Applicants believe that the Examiner's rejection of the dependent claims is based on application of the prior art in a manner inconsistent with its teachings, and on assertions of obviousness and inherency that are largely unsupported.

As earlier noted, claims 7-9 are amended herein solely to correct minor informalities, and accordingly, should be entered by the Examiner pursuant to 37 CFR §1.116.

All of the Examiner's arguments having been addressed, it is respectfully requested that the application be reconsidered and the final rejection of the claims withdrawn. Notice of allowance, with claims 1-10, is earnestly solicited.

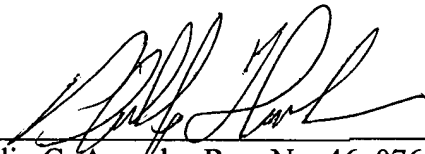
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Should the Examiner believe that an interview would help to expedite prosecution of this application, the Examiner is encouraged to call the undersigned attorney to arrange such an interview.

Respectfully submitted,

August 25, 2005

Date

  
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